



Australian Government

MSL977006 Contribute to the development of products and applications

Release: 1

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Modification History

Release	Comments
Release 1	This version was released in <i>MSL Laboratory Operations Training Package Release 2.0</i>. Supersedes and equivalent to MSL977001 Contribute to the development of products and applications. Prerequisites updated. Range of conditions removed. Assessment requirements amended. Equivalent outcome.

Application

This unit of competency describes the skills and knowledge to evaluate a product/application brief and to contribute to the development of products and applications to meet the requirements of the brief.

This unit applies to senior technical officers, laboratory supervisors and technical specialists working in all industry sectors. All operations must comply with relevant standards, appropriate procedures and/or workplace requirements.

No licensing or certification requirements exist at the time of publication. However, regulations and/or external accreditation requirements for laboratory operations exist, so local requirements should be checked. Relevant legislation, industry standards and codes of practice within Australia must also be applied.

Pre-requisite Unit

MSL976005 Evaluate and select appropriate test methods and/or procedures

Competency Field

Testing

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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1	Scope the development project	1.1	Confirm details of new product/application brief
		1.2	Specify new product/application requirements
		1.3	Analyse existing products (internal and external to workplace) to determine if they meet customer need
		1.4	Interpret and apply relevant Acts, regulations and codes of practice
		1.5	Prepare product/application development plan
		1.6	Obtain approval for development plan from appropriate personnel
2	Set scope of project	2.1	Estimate resource requirements, including staffing, equipment and materials needed to undertake the project
		2.2	Identify roles and responsibilities of project team members
		2.3	Identify quality requirements and quality standards
		2.4	Identify and document project timelines taking into account any constraints
3	Develop new product formulation	3.1	Prepare documentation for new product pilot batch
		3.2	Evaluate/recommend materials for new product/application
		3.3	Calculate required quantities of materials and adjust for properties as appropriate
		3.4	Develop/modify products in pilot batch scale in accordance with workplace and regulatory requirements
		3.5	Arrange for product evaluation against development brief
		3.6	Modify product/application to meet evaluation recommendations

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| | | 3.7 | Edit documentation and issue to appropriate personnel |
| | | 3.8 | Recommend and evaluate packaging for new product/application |
| | | 3.9 | Prepare protocol for stability (shelf) testing of new product/application |
| 4 | Assist with preparation of quality/regulatory compliance procedures/materials | 4.1 | Develop in-process and laboratory testing protocols |
| | | 4.2 | Prepare product labelling and submit for approval |
| | | 4.3 | Assist in product and analytical method validation |
| | | 4.4 | Implement an effective plant hygiene and asepsis program |
| | | 4.5 | Develop good manufacturing principles for medicinal products (GMP)/principles of good laboratory practice (GLP) protocols for approval by appropriate personnel |
| | | 4.6 | Prepare standard operating procedures (SOPs) for quality and laboratory-related procedures |
| | | 4.7 | Prepare work health and safety (WHS) procedures for the laboratory and manufacturing environment and submit for approval |
| 5 | Document and report project outcomes | 5.1 | Document and report project outcomes |
| | | 5.2 | Complete project reporting requirements |

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Equivalent to MSL977001 Contribute to the development of products and applications, Release 1.

Links

Training Package Companion Volumes -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>

Assessment Requirements for MSL977006 Contribute to the development of products and applications

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- evaluated at least 1 product/application brief, prepared the product development plan and contributed significantly to its development.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- principles of product or application development
- business goals and their relationship to specific product or application development
- new product/application requirements, expected performance outcomes and key indicators
- physical and chemical aspects of new product or application development
- details of development plan, budget and timeline for new product/application
- principles and practices of operation of pilot batch equipment
- uses, characteristics and limitations of formulation starting materials
- formulation development procedures
- details of regulatory compliance, quality and stability testing protocols and procedures required for new product/application
- calculations required to adjust properties
- awareness of environmental sustainability issues as they relate to the work task
- legal, ethical and work health and safety (WHS) requirements specific to the work task.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - a standard laboratory equipped with appropriate pilot batch manufacturing and testing equipment
 - online data search facilities
 - starting material and product formulation information
 - scheduling charts and project plans
 - standard operating procedures (SOPs) and workplace guidelines.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

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<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>